**N.B. Please note that, in case of any discrepancies, the Technical Specifications as mentioned in the ITB UNFPA/DNK/ITB/24/006 as posted in PDF on UNGM shall prevail.**

**SECTION II: Technical Specifications and Schedule of Requirements**

**2.1. Technical Specifications**

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| Lot No. and Item | Product Description | Quantity |
| Anesthesia Machine | Anesthesia units dispense a mixture of gasses and vapors and vary the proportions to control a patient's level of consciousness and/or analgesia during surgical procedures, for patients over 5 kg weight .  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connection according with the european standards  Eurostandard cable at least 3 meters long  Built-in rechargeable battery for at least 90 minutes of autonomy. Switch back and forth between battery and mains operation in case of power failures.  Availability of at least 3 additional sockets for connecting auxiliary equipment (monitor, infusion pump).  Technical specifications:  Adult and pediatric patients.  Electrically driven ventilator, supported by the internal battery in case of power failure.  Device suitable for low flow anesthesia, closed/semi-closed system.  Mounted on four (4) antistatic castors at least two of the castors with brakes.  With a surface/work table.  With at least two (2) drawers.  With a surface or shelf to place a vital signs monitor.  Two (2) gas inlets: O₂ and Air  Gas inlet connections compliant with DISS (according to the requirements of the destination country). With security systems to avoid errors in the gas connection.  Gas inlet pressure gauges.  Provided with a minimum of two (2) gas cylinder yokes for O₂ and Air. Connections compliant with DISS (according to the requirements of the destination country), gas hose and pressure regulators for O2 and Air cylinders will be accepted.  Flowmeters for O2, Air and N2O. Minimum range 0.1- 10 L/min. For O2 and N2O, resolution at least 0.05 L/min between 0.1--1.0L/min. Electronic flowmeters with the capacity to work with low flows will be accepted.  Two (2) vaporizer slots, with an interlock system preventing the use of more than one vaporizer simultaneously.  Safety system that prevents a hypoxic mixture, that guarantees a minimum concentration of 25%.  With a passive scavenging system  Self test  It must allow emergency start without running the tests, in no more than 60 seconds.  Oxygen flush  CO2 absorber canister, reusable, volume of at least 1.2 liters.  Built-in color display LCD, at least 15”.  Encoder for adjusting parameters  Brightness and Contrast Adjustment  User customization of display options  Display of waveforms, breathing loops, pressure, flow, volume, etc.  Display of trends in graphical and tabular form (at least 24 hours)  Displayed options (among other things):  Inspiratory oxygen concentration: compliance  Inspiratory flow: compliance  Airway pressure: compliance  Breathing rate: matching  Minute volume: compliance  Tidal volume: compliance  Positive end expiratory pressure (PEEP)  Indications and messages on the equipment must be in Russian.  All materials resistant to disinfection with hospital-grade products.  Ventilator and respiratory system:  Recirculation system for low-flow anesthesia.  Breathing system (Circular ventilation circuit) reusable, autoclavable.  Tidal volume should not depend on the level of fresh gas flow.  Ventilation modes: at least Volume Controlled, Pressure controlled, Synchronized intermittent mandatory ventilation (SIMV), Pressure support (PSV, PS)  Switching between manual ventilation (MAN/BAG) and automatic ventilation (ventilator).  Tidal volume delivered range at least: 20 – 1,500 mL.  Ventilation rate range at least: 4 - 99 bpm.  Adjustable I/E ratio or adjustable inspiration time.  Inspiratory pause adjustable.  Inspiratory pressure range at least: 3 – 60 cmH₂O.  PEEP range at least: 0 – 25 cmH₂O  Inspiratory flow: at least 0 to 120 L/ min.  Airway Pressure Limiting Valve (APL) for manual ventilation, adjustable 0.5-70 cm H2O column.  Adjustable trigger 0.5-10 l/min  Monitored and Displayed parameters, at least:  Integrated gas analysis module: O2, CO2, Isoflurane, Sevoflurane, MAC calculation. Display of monitored gas parameters on the device screen.  Respiratory rate  Tidal volume (preferably inspired and expired)  Minute volume  Airway pressure.  O2 concentration  End-tidal CO₂ (capnography)  PEEP  Plateau pressure  Peak pressure  Tree (3) waves vs time: pressure, volume, and flow  Battery status.  Alarm settings  Audio and visual alarms for at least:  High and low airway pressure.  Tidal volume  O₂ supply failure  O₂ concentration  Apnea.  Respiratory rate  Power failure  Low battery  System failures  Accessories:  Two (2) vaporizers, one for Sevoflurane and one for Isoflurane. With a visual indicator of the filling level of the anesthetic agent, and adapter for filling the vaporizer if required. Full compatibility of the vaporizer model offered with the anesthesia machine model offered. If a vaporizer from another manufacturer is offered, official confirmation from the respiratory and anesthesia device manufacturer of the full compatibility of the declared vaporizer must be provided.  One (1) Air pressure regulator, compatible with the medical gas system of the health unit. At least 3 meters long  One (1) O2 pressure regulator, compatible with the medical gas system of the health unit. At least 3 meters long  Hoses for Air and O2 with their respective connections compatible with the gas inlet of the equipment and the supplied pressure regulators.  Two hundred (200) complete consumable kits for the gas module.  Twenty (20) Pediatric disposable breathing circuits complete (including reservoir bag)  Two hundred (200) Adult disposable breathing circuits complete (including reservoir bag)  One (1) Oxygen cell, if applicable.  Three (3) Flow sensors, if applicable.  One-piece transparent mask (included), for adults, children, 2 pieces of each size  Breathing filters 100 pieces  Soda lime, color-changing: 10kg  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal).In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Indications on the equipment in the language of the destination country (Uzbekistan) or at least in English as mandatory.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center)  Legal address, contact phone numbers, Email, website (if any), full name of the head of the local technical service center  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 2 hours.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class IIb devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  IEC 60601-2-13 Medical electrical equipment — Part 2-13: Particular requirements for the safety and essential performance of anaesthetic systems | 161 |
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| Lot No. and Item | Product Description | Quantity |
| Obstetrical table | Adjustable table designed to support a woman's body in an appropriate position during labor and delivery and in other examination/treatment procedures related to pregnancy. Electrohydraulic control.  Technical specifications:  Operation: electrohydraulic.  Availability of a built-in battery for operation during power outages  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connection according with the european standards  Number of sections: at least 3 sections (backrest, seat and detachable footrest).  Structure made of stainless steel, with anticorrosive finish in epoxy/electrostatic paint or higher quality.  Removable or foldable side restraints on each side of table, made of Polypropylene or similar, stainless steel or steel with anticorrosive finish in epoxy/electrostatic paint, or higher quality  Head and lower ends made of Polypropylene or similar, stainless steel with anticorrosive finish in epoxy/electrostatic paint, or higher quality. Lower end removable.  Mattress: high-density polyurethane foam, in sections that match layout of table sections. Plastic cover, waterproof and washable with hospital-grade disinfection products.  Seat section with gynecological perineal cut.  Mounted on or four (4) antistatic wheels, with brakes on all of them, of at least 12.5 cm of diameter.  Load weight capacity min.: 250 kg.  Width: at least 80-90 cm  Total Length: at least 200 cm  All materials resistant to hospital-use disinfectants  Movements:  Adjustable height at least between 60 to 85 cm from floor level.  Adjustable backrest up to 70°-80° for sitting birth.  Trendelenburg positioning, at least 10°  Anti-Trendelenburg positioning.  Release mechanism to CPR position  Accessories:  Detachable footrest section.  Two, footrests  Two Heppel leg holders, removable or foldable, adjustable in all planes (height, width and vertical angulation), with straps.  Two hand holders, adjustable on each side of the table.  Removable stainless steel fluid bowl.  Armrest: at least 0.4 m long, adjustable on each side of the table.  Availability of stainless steel rails for mounting auxiliary equipment.  IV pole with at least two hanging hooks, adjustable on each side of the table.  Availability of a control panel, with additional control on the side walls of the bed.  Documentation requirement:  Instructions for use and service manuals must be provided (including procedures for decontamination, required equipment and procedures for calibration and routine maintenance). In Russian language.  Service manual must be provided (including installation instructions, preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center)  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconferences.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class I devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests.  IEC 60601-2-52:2009 Medical electrical equipment - Part 2-52: Particular requirements for the basic safety and essential performance of medical beds. | 294 |
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| Lot No. and Item | Product Description | Quantity |
| Electrosurgical Unit | Device that uses high frequency electrical energy in a radio-frequency (RF) band to develop heat directly within soft-tissue cells (thermodynamic) for cutting and coagulating tissue typically during general surgical procedures.  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connection according with the european standards  Technical specifications:  Application Monopolar and bipolar  Modes: pure cut, blend, and coagulate (including spry coagulation mode).  Automatic regulation of output power upon impedance changes.  Power activation controlled by foot switch, and by handswitch at the handpiece.  RF generator output at least 350 kHz.  Output electrically isolated from ground.  Visual and audible activation indicators.  Visual and audible alarms.  Patient plate/return electrode contact monitoring system.  Power output blocking in case of active electrode or patient plate contact failure.  Power control and mode select in the main panel.  Display for power settings.  Self-test.  Minimum RF output power:  Monopolar cut 300 W, +/- 15% or 5 W whichever is bigger, at 300 Ohms.  Monopolar coag 120 W, +/- 15% or 5 W whichever is bigger, at 300 Ohms.  Bipolar 80 W, +/- 15% or 5 W whichever is bigger, at 100 Ohms.  All materials resistant to hospital-use disinfectants.  Accessories:  Foot switch for monopolar and bipolar modes, with connecting cable. Independent pedals will be accepted for monopolar output and bipolar output.  Two reusable, sterilizable, monopolar patient plates with connecting cable  One hundred (100) adult disposable split electrode plates.  Two reusable connection cables for disposable split electrode plates.  One hundred (100) disposable monopolar electrodes (pencils), finger switch controlled, with connecting cable.  Two reusable, sterilizable, monopolar electrode handles, (pencils), finger switch controlled, with connecting cable.  Two reusable, sterilizable, monopolar electrode handles, (pencils), foot switch controlled, with connecting cable.  Two sets of different monopolar reusable electrodes: blade, needle, ball, loop, and coagulation electrodes.  Two bipolar forceps, reusable, foot switch controlled, with connecting cable.  Ten disposable electrosurgical pencils, with selection of electrodes: blade, needle, ball, loop, and conization electrodes.  Reusable adapters and cables for monopolar and bipolar handpieces.  Trolley made of steel with anti-corrosive epoxy coating, aluminum, AISI 304 stainless steel or higher quality material. With 4 antistatic castors, 2 with brakes.  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center).  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 2 hours.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class IIb devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  IEC 60601-2-2: Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories. | 164 |
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| Lot No. and Item | Product Description | Quantity |
| Fetal cardiac monitor | Fetal monitoring provides graphic and numeric information on fetal heart rate (FHR) and maternal uterine activity (UA) to help clinical personnel assess fetal well-being.  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connection according with the european standards  Built-in rechargeable battery, allowing at least 1 hour of continuous operation.  Technical specifications:  Capable of monitoring fetal heart rate (FHR) and uterine contractions (UC).  LCD or TFT screen of at least 7"  Continuous monitoring of fetal heart rate (FHR) by ultrasonic pulsed doppler mode with autocorrelation.  Dual Ultrasonic Heart Rate channels for Twins Monitoring (FHR1, FHR2). Two (2) FHR ultrasound transducers included.  Fetal awakening stimulator.  Display shows at least FHR1, FHR2, UCs and alarms.  Automatic detection of transducers.  Detection of heartbeat coincidence between both fetal channels and maternal heartbeat.  Ultrasound frequency: 1 MHz +/- 10%.  Intensity of the ultrasound not greater than 5 mW / cm2.  Monitoring of FHR in the range of at least 50-210 bpm, resolution 1 bpm, and accuracy of at least +/- 2 bpm.  Uterine contractions measured in the range of 0-100 relative units, resolution of 1 unit. Toco-transducer waterproof included.  Toco-transducer auto and manual zeroing.  Remote switch for event marking. One (1) remote switch event marker with cable included.  Automatic self-test.  Integrated thermal printer with automatic and manual print-out modes  Print at least FHR1, FHR2, uterine contractions, fetal movement, and marked events  Print speeds 1, 2 and 3 cm/min  Fetal heart rate scale at least 50-210 bpm / min  All materials resistant to disinfection with hospital-grade products.  Indications and messages on the equipment in the language of the destination country (Uzbekistan) or at least in English as mandatory.  Accessories:  Two (2) adjustable belts for ultrasound and toco transducer  At least five (5) pieces of thermal recording paper  Ten (10) bottles of ultrasound gel, not less than 1 liter each, or the equivalent of 10 liters in total if the bottles were smaller  NOTE: The bidder must include all the necessary accessories for the correct operation of the product, including all standard tools, cleaning and lubrication materials, even if they are not included in these required technical specifications. | 455 |
| Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center).  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan. |
| Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 2 hours. |
| Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class IIb devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan. |
| Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  IEC 60601-2-37:2007+AMD1:2015 CSV Particular requirements for the basic safety and essential performance of ultrasonic medical diagnostic and monitoring equipment |

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| Lot No. and Item | Product Description | Quantity |
| Intensive care ventilator | This device is designed for long -term controlled artificial ventilation of lungs in adults and children from 5 kg in stationary conditions.  Equipment to be used in critical care areas, stationary, not suitable for transport  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connections are in accordance with the european standards.  Built-in rechargeable battery for at least 120 minutes of autonomy. Switch back and forth between battery and mains operation in case of power failures.  Technical specifications:  Adult and paediatric patients.  Mounted on a trolley with four (4) antistatic castors, at least two of the castors with brakes.  Turbine technology for air supply. Turbine useful life not less than 40,000 hours  Oxygen inlet connections compliant with DISS (according to the requirements of the destination country). With security systems to avoid errors in the gas connection.  Oxygen connection in the range of 2-6 atm, operation from low pressure oxygen is also required (concentrator/low pressure flow) 0-20 l/min  Display LCD, at least 12”, touch screen technology  Controlling device functions through mechanical quick access buttons on the monitor  Rotary switch with confirmation function  Automatic compliance and leakage compensation for circuits and tubes.  Expiratory valve or expiratory block autoclavable  Flow sensor removable and autoclavable  Self-test  Leak test  Drugs nebulizer, on the inhalation line, with automatic control of inhalation volume  Preoxygenation function for sanitation and procedures for at least 2 minutes at 100% oxygen  PEEP range at least: 0 – 35 cmH₂O  Ventilation rate up to 150 bpm at least  Tidal volume range at least: 5 – 2000 mL.  Adjustable I/E ratio or adjustable inspiration time.  Pressure Support: at least 0 - 60 cmH₂O  Inspiratory pressure: at least 1 to 80 cm H2O.  Inspiratory flow: at least 2 - 200 l/min  Inspiration time in the range of at least 0.2 -5 seconds  FiO₂ adjustable: 21 - 100%.  Adjustable trigger, in the range of 1-15 l/min  Inspiration rise time adjustable  Mainstream capnometry  All materials resistant to disinfection with hospital-grade products.  Indications and messages on the equipment in Russian and in English as mandatory.  Ventilation modes:  Assist Control mode.  Pressure Controlled Ventilation (PCV)  Volume Controlled Ventilation (VCV).  Pressure-Regulated Volume Control (PRVC).  Synchronised Intermittent Mandatory Ventilation, volume-controlled breaths (SIMV- VC), and pressure support.  Synchronised Intermittent Mandatory Ventilation, pressure-controlled breaths (SIMV- PC) and pressure support.  Continuous Positive Airway Pressure mode (CPAP) and pressure support.  Apnea-backup ventilation mode.  CPAP  Biphasic positive airway pressure mode (BiLevel Airway Pressure Ventilation, BiPAP, DuoPAP)  Pressure Support Ventilation (PSV).  Non-invasive ventilation (NIV)  Monitored and Displayed parameters, at least:  Respiratory rate  Inspired and expired tidal volume  Spontaneous tidal volume  Minute volume (spontaneous and mechanical)  I:E ratio  Inspiratory and expiratory times.  Airway pressure, peak and mean.  Respiratory rate (spontaneous and mechanical)  FiO2  PEEP  Plateau pressure  Peak pressure  Intrinsic PEEP  End tidal CO2  Three (3) waves vs time: pressure, volume, and flow  Pressure-Volume, Flow-Volume and Pressure-Flow loops.  Battery status.  Alarm settings  Calculation of breathing mechanics, compliance and resistance  Audio and visual alarms for at least:  High and low airway pressure.  Tidal volume  Minute Volume  FiO₂  Apnea  Respiratory rate  Patient disconnection  Gas supply failure  Power failure  Low battery  System failures  Accessories:  Servo-controlled humidifier suitable for invasive and non-invasive ventilation modes, with reusable water reservoir, temperature sensor, heater cable and holder to attach to the ventilator (If it is a different brand than the ventilator, it must be compatible with the equipment offered).  Three (3) additional reusable reservoirs for the humidifier.  Support arm for patient-circuit, adjustable.  One (1) O2 pressure regulator, compatible with the medical gas system of the health unit.  Hose for O2 with their respective connections compatible with the gas inlet of the equipment and the supplied pressure regulators.  One (1) expiratory valve or expiratory block autoclavable, in addition to that included in the device.  One (1) test lung, adult/paediatric.  Thirty (30) Paediatric disposable patient circuits complete  Forty (40) Adult disposable patient circuits complete  Three (3) Housings for mainstream capnography sensor, reusables. In the case of disposable Housings, deliver at least 20 units  One (1) Oxygen cell, if applicable, in addition to that included in the device.  Two (2) reusable flow sensors, if applicable, in addition to that included in the device. In the case of disposable flow sensors, deliver at least 20 units  Antibacterial filter: 200 pcs.  Nebulizer sets: 10 units  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center).  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 2 hours.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class IIb devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  IEC 60601-2-12:2001 Medical electrical equipment - Part 2-12: Particular requirements for the safety of lung ventilators - Critical care ventilators | 224 |
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| Lot No. and Item | Product Description | Quantity |
| Operating light | A device designed to provide a specialized source of light for illumination of a site of medical intervention. Single-dome operating ceiling lamp, LED technology  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  Rechargeable batteries or on-line UPS with:  autonomy of at least 90 minutes of continuous use at maximum power.  automatic passage from line alimentation to battery operating modes.  All electrical connections according to the european standards.  Technical specifications:  Ceiling mounting system, with articulating arm.  LED technology. The number of LEDs must be at least 50  Minimum light life: 50,000 hrs.  Illumination level, at 1m distance, at least 120,000 lux. Without shadows.  Color temperature between 4,000 and 5,000 K.  Color Rendering index of the illumination at least 92%.  Adjustable light spot 20-30 cm (at 1 meter distance from the light source).  Field depth at least:100 - 120 cm  Temperature increase at the level of the surgeon’s head: no more than 2 ° С  Heat to light ratio ≤ 6 mW/m2\*lx.  Control panel located on the lamp, with on/off control and light intensity adjustment.  Intensity adjustment: at least 3 levels.  All materials resistant to hospital-use disinfectants.  Movements:  Lamp head turning angle (inclination) at least 180°  Horizontal degree of freedom on all axles 360°.  Arm vertical adjustment range at least 0.75 m  Operating conditions:  Ambient temperature: 10°C - 40°C  Relative humidity: 30% – 75 % RH  Accessories:  All elements necessary to anchoring and fixing the system on the ceiling  Four (4) removable and autoclave sterilizable handler  Installation:  The supplier will carry out equipment installation, and safety and operational checks prior to delivery, leaving the equipment operating according to the manufacturer's specifications. The cost of installation should be included in the offer.  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including installation instructions, preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center)  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider. .  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 1 hour.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class I devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485 Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  IEC 60601-2-41 Medical Electrical Equipment, Part 2-41: Particular Requirements for the Safety of Surgical Luminaires and Luminaires for Diagnosis. | 161 |
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| Lot No. and Item | Product Description | Quantity |
| Operating table | A mobile, electrohydraulic table designed to be adjusted to support a patient during many types of surgical interventions. Electrohydraulic control.  Technical specifications:  At least 4 articulated sections: head, back, pelvis and 2 separate legs sections.  Operation: electrohydraulic.  Availability of a built-in battery with a capacity of up to 300 movements  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connection according with the european standards  All structure, sliders/fixtures rail for accessories, and accessories, made of stainless steel grade 304.  Mounted on or four (4) antistatic wheels, with central brake.  Lateral accessory rails of stainless steel, grade 304.  All sections with mattress detachable. Cover anti-static, waterproof and washable with hospital-grade disinfection products.  Load weight capacity: at least 220 kg.  Width: at least 50 cm  Length: at least 200 cm  All materials resistant to hospital-use disinfectants  Movements:  Height movement range: at least 80 to 120 cm from the floor level. Pedal-operated.  Trendelenburg at least 25°  Reverse trendelenburg at least 25°  Right and left lateral tilt range: at least 20°  Adjustable backrest at least 70°  Leg area removable, consists of 2 independent sections, each adjustable to up/down at least +15/-90°, and left/right.  Head area removable, with adjustable angle.  Stainless steel rail on both sides for attaching auxiliary equipment and accessories  Accessories:  Two (2) armrests, at least 0.4 m long, with fixation clamps and fixation strap. Adjustable height and horizontal angle. Attachable to each side of the table.  Two (2) Heppel supports, lithotomy crutch, with fixation clamps and fixation strap. Adjustable tilt and rotation.  Two (2) lateral supports, with fixation clamps, height adjustable.  One (1) anesthesia screen arc, with fixation clamp, attachable to each side of the table.  Two (2) spare fixation clamps.  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Indications on the equipment in the Russian language or at least in English as mandatory.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center).  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 2 hours.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class I devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests.  IEC 60601-2-46 Medical Electrical Equipment - Part 2-46: Particular Requirements for the Basic Safety And Essential Performance Of Operating Table | 161 |
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| Lot No. and Item | Product Description | Quantity |
| Patient monitor | Used to measure basic physiologic parameters and track the status of patients.  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connection according with the european standards (Cable at least 2 meters long)  Built-in rechargeable battery, allowing at least 2 hours of continuous operation.  Technical specifications:  For use in adult, pediatric and neonatal patients.  Automatic setting of alarm limits and cuff pressure limit for each type of patient.  Monitoring at least: ECG and Heart Rate (HR), Respiratory Rate (RR), Oxygen Saturation (SpO₂), non-invasive blood pressure, and Temperature.  LCD TFT display, 1280\*800 resolution, possibly touchscreen, at least 12”.  Display of at least 4 waveforms and numeric parameters simultaneously.  Configurable display.  Defibrillator shock protection.  Trend storage of at least 120 hours.  Availability of a USB port for installing program updates and for recording parameters  Availability of a built-in thermal printer  ECG:  At least 5-leads: I, II, III, aVR, aVL, aVF, V.  ECG main cable (if applicable) and two (2) sets of patient cable terminals (1 neonatal/pediatric, 1 adult if applicable), included.  Simultaneously display a minimum of 2 ECG traces, and HR value.  Heart rate measurement range. Adult: at least 15 – 300 bpm, Pediatric and neonatal: at least 30 – 300 bpm. Accuracy: ± 1% or ± 1 bpm, whichever is greater.  Signal amplification 5-10-20-40mm/mV  S-T segment and arrhythmia analysis.  Pacemaker detection.  Lead off condition detected and displayed  Adjustable sweep speed  Respiration.  Technique: transthoracic impedance  Measurement range: at least 6 – 120 rpm; 5-150 for neonatal. Resolution: 1 rpm  Display of waveform, and RR value.  Adjustable sweep speed  Non invasive blood pressure  Technique: oscillometric  Three (3) reusable blood pressure cuffs (1 neonatal, 1 pediatric, 1 adult) with hoses included.  Manual and automatic measurement, with configurable intervals.  Display diastolic, systolic and average pressure.  Measurement range.  Adults. Systolic: at least 40 – 250 mmHg , Diastolic: at least 10 – 210 mmHg. Maximum mean error: ± 5 mmHg  Pediatric. Systolic: at least 30 – 180 mmHg , Diastolic: at least 10 – 150 mmHg. Maximum mean error: ± 5 mmHg  Neonatal. Systolic: at least 30 – 130 mmHg, Diastolic: at least 10 – 100 mmHg. Maximum mean error: ± 5 mmHg  Pulse oximetry  MASSIMO/NELLCOR technology  Measurement range: 0 – 100%. Resolution: 1%, SpO2. Accuracy at least ± 3% within the range 70 – 100%  Pulse rate: 30 – 250 bpm, resolution: 1 bpm, accuracy: 2% or 2 bpm, whichever is greater.  Display of percentage of oxygen saturation, plethysmography curve and heart rate.  Main cable of SpO2, if applicable, included.  Three (3) SpO2 sensors, reusable clip-on type, adult pediatric and neonatal sizes, included.  Temperature:  Cutaneous / abdominal.  Two temperature measurement channels: T1, T2, ∆T  Measurement range: at least 0 - 45°C. Accuracy: ± 0.1° C. Resolution: 0.1°C  Four (4) skin and esophageal temperature probes, reusable, 1 of each adult and 1 of each pediatric included.  Alarms:  Audio-visual alarms for all monitored parameters  Adjustable high and low alarm limits for all monitored parameters.  Temporary silence functions.  Leads-off or sensor disconnect.  Apnoea alarm.  AC status and low battery  Automatic self-test.  All materials resistant to disinfection with hospital-grade products.  Indications and messages on the equipment must be in Russian language.  Accessories:  Reusable cuff for adults sizes M, L, XL; newborns - disposable: 20 units of each size.  One (1) host for NIBP, in addition to that provided with the device  ECG main cable (if applicable), in addition to that provided with the device.  Two hundred (200) self-adhesive ECG electrodes  Two (2) sets of ECG patient cable terminals (1 neonatal/pediatric, 1 adult if applicable), in addition to that provided with the device.  One (1) skin temperature sensor, reusable, adult size, in addition to that provided with the device.  One (1) Main cable of SpO2 (if applicable) in addition to that provided with the device.  At least three (3) SpO2 sensors adult size, reusable clip-on type, in addition to that provided with the device.  At least two (2) SpO2 sensors, pediatric size, reusable clip-on type, in addition to that provided with the device.  Two (2) SpO2 sensors, neonatal size (for children weighing from 1-5kg), reusable clip-on type, in addition to that provided with the device.  Twenty (20) SpO2 sensor, single-use, wrap-around type  NOTE: Bidder must include all accessories necessary for the product to function properly, even if they are not included in these required specifications.  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center).  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 2 hours.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class IIb devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  IEC 60601-2-49: Medical Electrical Equipment - Part 2-49: Particular Requirements For The Basic Safety And Essential Performance Of Multifunction Patient Monitoring Equipment | 460 |
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| Lot No. and Item | Product Description | Quantity |
| Vacuum extractor | Electrically powered vacuum extractor system to assist vaginal deliveries in a delivery room setting  Electrical Requirements:  Power requirements according to Uzbekistan standards: in the range of 110 - 220 VAC, 50 Hz. Power cord with plug type F.  The equipment must tolerate input voltage variations of +/- 20%.  All electrical connections according to the European standards.  Technical specifications:  Vacuum range, continuous, adjustable: at least 0 to a 675 mmHg .  With a vacuum gauge.  Suction flow: at least 30 L/min.  With a vacuum control button and on/off-switch.  With foot pedal and manual suction function activation. Pedal provided.  Plastic vacuum collection bottle reusable, sterilizable or washable, resistant to hospital-grade products.  Capacity of vacuum collection bottle at least 1000 ml, with overflow protection system (anti-spill system).  Suction tubing reusable, provided.  Oil free motor  All parts coming into contact with contamination media must be cleanable  Mounted on a trolley with four (4) antistatic castors, at least two of the castors with brakes  All materials resistant to disinfection with hospital-grade products.  Indications and messages on the equipment in the language of the destination country (Uzbekistan) or at least in English as mandatory.  Accessories:  Vacuum collection bottle, in addition to that included in the device.  One (1) Bird type suction cup, occiput posterior, stainless steel autoclavable, 50 mm sizes.  Two (2) sets of soft suction cups, silicon type, reusable, 40 mm, 50 mm and 60 mm sizes.  Two (2) Extraction handle, autoclavable.  One (1) suction tubing, in addition to that included in the device. At least 2 meters long.  One (1) Suction hose reusable, in addition to that included in the device.  Documentation requirement:  User manual must be provided (including operation instructions, maintenance and/or procedures for decontamination, storage conditions, safe disposal). In Russian language.  Service manual must be provided (including preventive maintenance and calibration procedures, equipment necessary for preventive maintenance and repair, diagrams and circuits). In Russian language.  Contact details of manufacturer, supplier and local service agent must be provided:  Copy of the agreement between the bidder and the local service center for the provision of services  Manufacturer's authorization issued to the local service center for the right to provide maintenance services for the declared medical equipment (copy certified by the seal of the bidder and the local service center).  Certificate of calibration and inspection to be provided, if applicable.  List of common spares and accessories with part numbers must be provided.  Manufacturer authorization.  Free sale certificate of origin country if other than Uzbekistan.  Other requirements:  All standard accessories, consumables and parts required to operate the equipment, including all standard tools, cleaning and lubrication materials must be included.  A minimum of two years of in-country after-sale services by an authorized local service provider.  Must include training on use, cleaning, disinfecting and basic maintenance on-site or in teleconference for at least 1 hour.  Regulatory approvals required:  National Regulatory Agency/Authority (NRA) requirements compliance, if applicable.  And at least one of the following regulatory approvals and certificates:  European Certificate of Conformity (CE) with directive 93/42 EC or regulation 2017/745 (with indication of Notifying Body) for Class IIa devices, or  FDA (Food and Drug Administration) of the USA that certifies marketing permission in the United States, or  Other regulatory bodies of an IMDRF founding member country such as Australia, Canada, or Japan.  Safety & product Standards:  Bidder shall furnish the documentary evidence to demonstrate that the good it offers meet the international safety & regulatory standards, providing in addition a signed and dated Declaration of Conformity (DoC) according to ISO 17050 stating compliance to the follow standards:  ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.  IEC 60601-1: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance  IEC 60601-1-2: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests  ISO 10079-1:2022 Medical suction equipment -- Part 1: Electrically powered suction equipment. | 251 |
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